the nasal cavity, by means of a special conically shaped knife. In addition to this means for securing a free issue for pus, he subsequently washed out the antrum by means of a syringe with a bent nozzle. Recently Dr. Link published his two cases where a complete cure had been obtained by Mikulicz's puncture of the antrum with subsequent irrigation. From these cases of his Dr. Link draws the conclusion that Mikulicz's plan is by far better than Stoerk's. The natural nasal orifice of the antrum can be reached by a syringe but with difficulty; besides it is situated too high up to allow a thorough reflux of the pus accumulated in the cavity. The author recommended, further, to perform percussion of the antrum for diagnostic purposes. He takes a smooth cylindrical wooden stick of the size of a finger, fixes one of its ends at the hard palate just above the second molar, and taps with a finger on the other end. When Highmore's cavity is empty, a full resonant tone is heard. When the antrum contains pus or a solid foreign body (or, for the sake of an experiment, water), the percussion sound becomes dull. A closure of the corresponding nostril is said to manifest no influence on the pitch of the tones.—*Przeglad Lekarski* (Cracow, Poland), Feb. 4, 1888.

V. IDELSON (Berne.)

V. Case of Total Extirpation of the Larynx for Epithelioma. By WM. GARDNER, M. D. (Adelaide, Australia.) A man æt. 62, without syphilitic taint, presented a tumor of the larynx which was found to be epitheliomatous upon examination of a piece removed with the laryngeal forceps, and the following operation was performed. An incision was made in the median line, from the hyoid bone to the second ring of the trachea, and the tissues were gradually dissected back from the sides of the larynx. On the right side, the superior cornu of the hyoid bone was dissected out, and the left was cut through at the base, as the light was bad on that side of the patient. The fascia attached to the thyroid cartilage was set free without dividing the thyro-hyoid membrane. Pressure forceps were applied to all bleeding points, and general oozing was reduced by the application of hot sponges. The trachea was then divided between the cricoid

and its upper ring, but owing to calcification of the cartilages, the rectangular tube could not be inserted. A large tracheotomy tube was then introduced, the larynx dissected up from the œsophagus and removed, the epiglottis being cut through at its base. The superior thyroid arteries were caught up by forceps and tied before complete separation was effected. The wound was dusted over with iodoform, and covered above the tube with absorbent wool. The tube was then fixed securely with tapes. The time occupied by the operation, from the commencement of the administration of chloroform, was fifty-five minutes.

The patient rallied well from the operation, and although nearly moribund from the blocking of the tube on the following day, he was readily resuscitated and passed on to a good recovery, and after eighty days was able to go about the streets unaccompanied. The upper part of the wound had closed and he wore a large tracheotomy tube which was cleansed twice daily. He could articulate sufficiently with the lips to make himself understood, and the patient refused to have the upper part of the wound reopened for the insertion of the vocal apparatus, preferring to remain as he was rather than run even the slightest risk. There was no recurrence of the disease and deglutition was perfectly performed. Removal of half the larynx was in this case contraindicated by the location of the growth near the middle lined. The author recapitulates as follows:

"1. The great object to be aimed at is to remove the disease so completely as to prevent the probability of a recurrence *in situ*, and this can be best attained by the extirpation of the whole larynx.

"2. The next object to be aimed at is the prevention of blood and pus passing down from the wound above into the trachea, and the complete removal, with the immediate insertion of a rectangular tube, fitting the trachea closely, is the method best calculated to secure this end.

"3. It is also very important to have the anæsthetic administered at some distance from the wound during the latter stages of the operation, and for this purpose a rubber tube, fitting on to the rectangular tube, and carried out to the shoulder meets the indication fully.

Anæsthesia is then maintained without in the slightest degree interfering with the operation.

"4. In spite of statistics, I do not believe that a partial excision is *prima facie* more likely to be successful than a total extirpation, and the apparent improvement in results is probably due to the fact that the partial excisions were done by operators who had had previous experience in total extirpation.

"5. Lastly, I believe that removal of the whole larynx lessened the risk of perichondritis."—*Australian Medical Journal*, May, 1888.

JAMES E. PILCHER (U. S. Army).

VI. Cyst of Left Vocal Cord. By CHAS. W. HAYWARD, M.D. (Liverpool.) Patient was a female aged forty-three, healthy in appearance, markedly hoarse, had been so for six months, and it was getting worse. Larynx normal, except left cord. On the middle three-fifths of the cord for its entire breadth was a cyst, rounded in contour and sloping off at the ends, about one-eighth of an inch in thickness. Translucent and slightly striated in appearance. A ten per cent. solution of cocaine was painted on and the cyst incised with Schrotter's guarded inter-laryngeal knife. Clear mucus exuded. The cyst wall was pulled out by Schrotter's pincette and the inside touched with solid nitrate of silver, very little pain was experienced. The larynx was pencilled with weak solution of nitrate of silver for a few days. In about a fortnight the patient returned home, hoarseness almost disappeared and the cord looking very nearly normal.—*Lancet*, September 15, 1888.

H. H. TAYLOR (London.)

VII. Contributions to the Study of the Indications for Thyrotomy and Laryngotomy for Cancer of the Larynx. By CH. MONOD (Paris) and M. RENAULT (Paris.) From observations made upon a patient suffering from cancer of the larynx and who died following a preliminary trachotomy, the authors state the following indications for the treatment of this disease: 1st. As soon as there is only a suspicion of the disease, the patient should be informed of the dangers to be apprehended in order to be on his guard. 2nd. In